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Volume X

Number III

BULLETIN OF

The

Georgia School of

Technology

1913-1914

MECHANICAL ENGINEERING
ELECTRICAL ENGINEERING
CIVIL ENGINEERING
TEXTILE ENGINEERING
ENGINEERING CHEMISTRY
CHEMISTRY, ARCHITECTURE

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October, by the

Georgia School of Technology

Office at the School

Atlanta, Ga., July, 1913

Entered as Second Class Matter at the Post-office at Atlanta, Ga.

BY action of the Legislature the number of free scholarships granted each county in the State is fifteen. Many of these scholarships are still available. Write to President K. G. Matheson for a free scholarship from your county.

LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA
— MAR 1913

Georgia School of Technology

CALENDAR, 1913-1914

First Term

Begins 8:00 A. M., September 17, 1913, ends February 1, 1914.

Entrance Examinations and Re-Examinations begin September 8, 1913. Schedule of these examinations will be mailed to applicants after August 1, 1913.

Christmas vacation begins at 11 A. M., December 23, 1913; ends 8:00 A. M., January 5, 1914.

Examinations to remove Second Term Deficiencies of the previous session will be held during the week beginning January 2, 1914.

Second Term

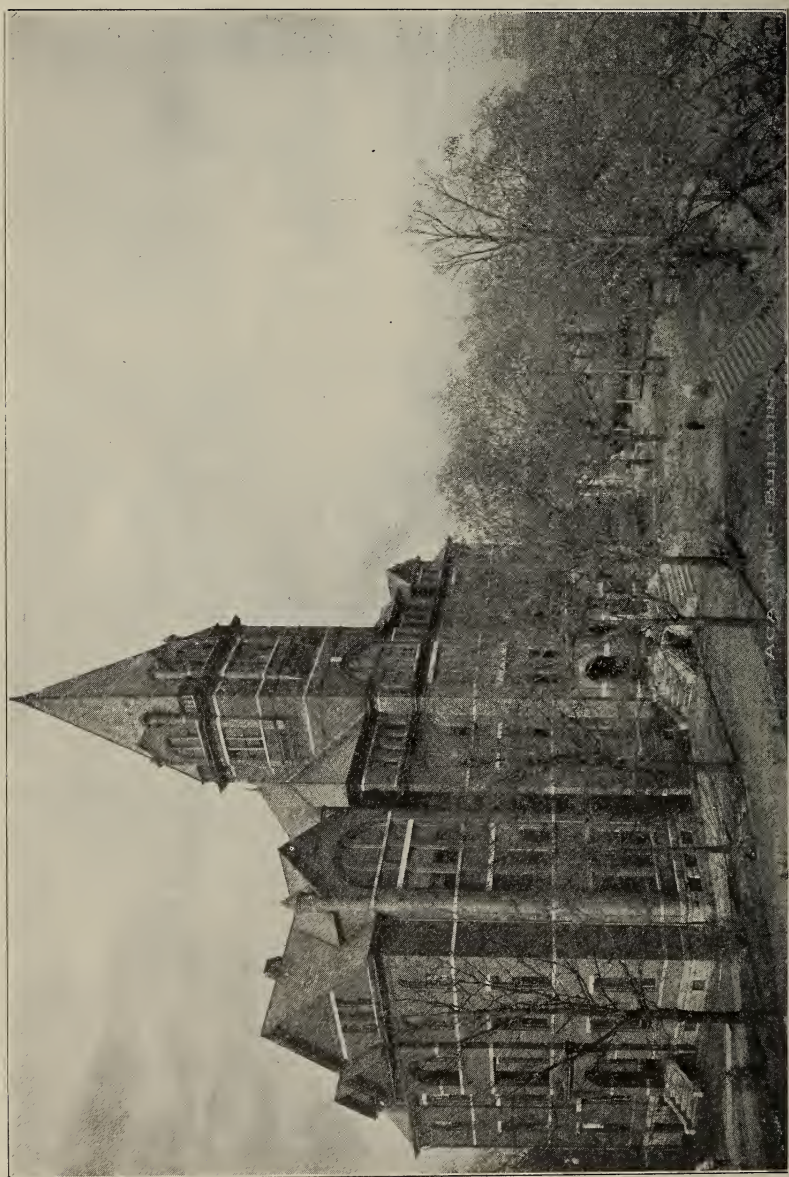
Begins 8:00 A. M., February 2, 1914; ends June 10, 1914.

Commencement Day, Wednesday, June 10, 1914.

By order of the Board of Trustees, the only Holidays to be observed are Thanksgiving Day, and Memorial Day (April 26th).



TRAINING CIVIL ENGINEERS AT "TECH."



Historical Sketch

THE Georgia School of Technology was founded by the State Legislature in 1885, the bill for its establishment having been introduced by Honorable N. E. Harris, of Macon, Ga. During the summer of 1888, the buildings and part of the equipment being ready, a Faculty was elected and academic and shop work began October 3, of that year. By additional legislative appropriations and by gifts from interested friends, the plant and equipment of the institution have been greatly enlarged and are now fully adequate to the needs of an engineering institution of the highest rank. The plant at present consists of nearly twenty-one (21) acres of land, located in the city of Atlanta, on which are fourteen buildings, erected and used for School purposes. The equipment in the various departments of engineering is very valuable and represents an outlay of over \$200,000.00. It is estimated that the total valuation of the plant is over \$800,000.00, and valuable additions are constantly being made thereto.

The School is supported by the State of Georgia, annual appropriation for maintenance being made by the legislature, supplemented by other appropriations for buildings and equipment. The city of Atlanta also makes an annual appropriation for maintenance.

The following degree courses are offered:

Bachelor of Science in Mechanical Engineering.

Bachelor of Science in Electrical Engineering.

Bachelor of Science in Civil Engineering.

Bachelor of Science in Textile Engineering.

Bachelor of Science in Engineering Chemistry.

Bachelor of Science in Chemistry.

Bachelor of Science in Architecture.

In addition the following departments are in most effective operation:

Mathematics,

English,

Experimental Engineering,

Physics,

Drawing,

Geology,

Mineralogy,

Physical Culture.

Modern Languages, including French, German and Spanish.

The object of the School is to supply engineering leaders for the industrial development of Georgia and the South, and to this end the principles and application of science are taught, especially those which relate to the mechanical, industrial and textile arts. The instruction both practical and theoretical is of high grade, and the splendid record of the School's complete roster of graduates fully justifies its claim to engineering standards of the highest degree. Due to the marvelous industrial development of the South, and the high standard of work done in the Georgia School of Technology, the demand for the School's graduates is much greater than the supply.

The School seeks to inculcate high principles of character and conduct and its students have a record for good conduct unsurpassed by any corps in the country. For trained leaders, a marvelous prospect of success in the industrial world is open to the young men of Georgia and the South. This institution supplies such training to its students, and offers advantages of the highest value and efficiency to young men.

The session just closed has been the most successful in the history of the institution, a total of 857 students having enrolled as follows:

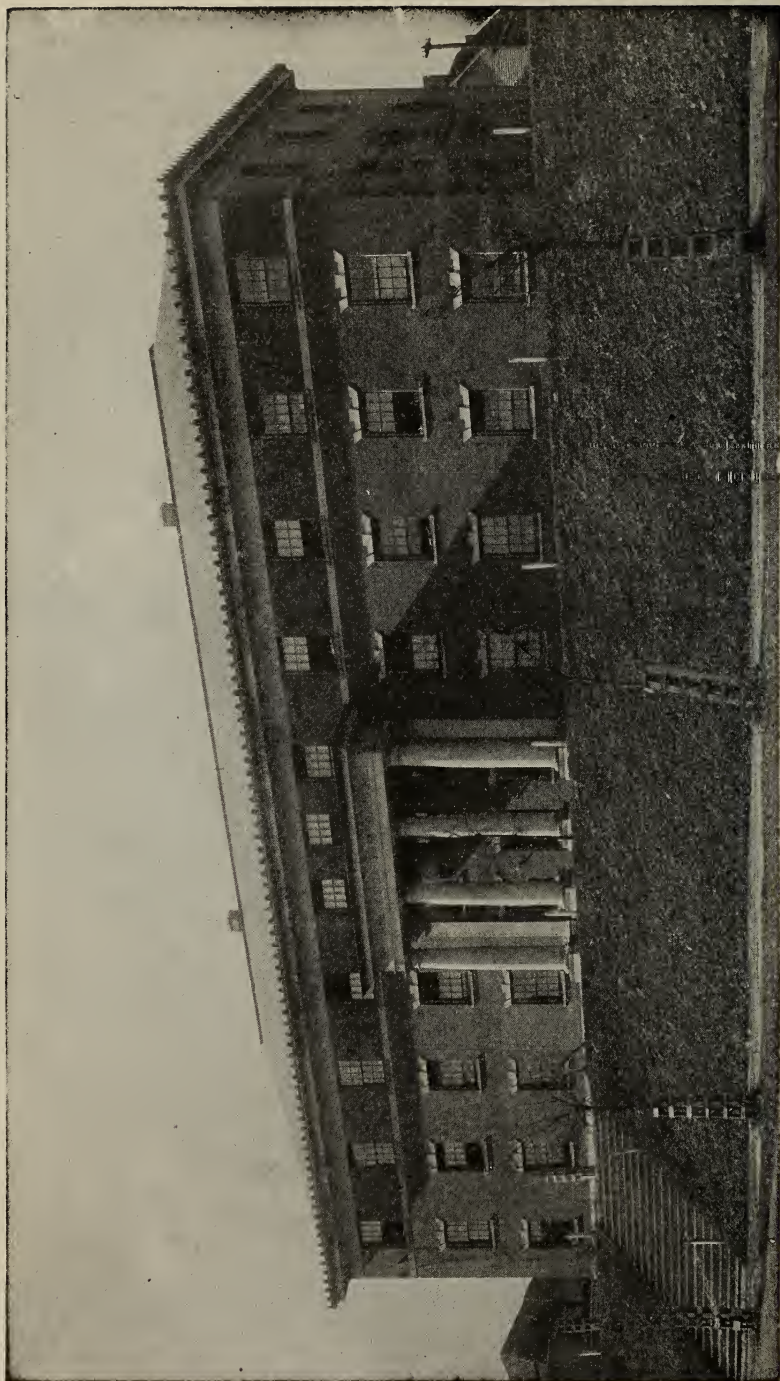
Engineering	660
Night School	132
Summer School	113

905

Deduct names counted twice.....100

Total enrollment805

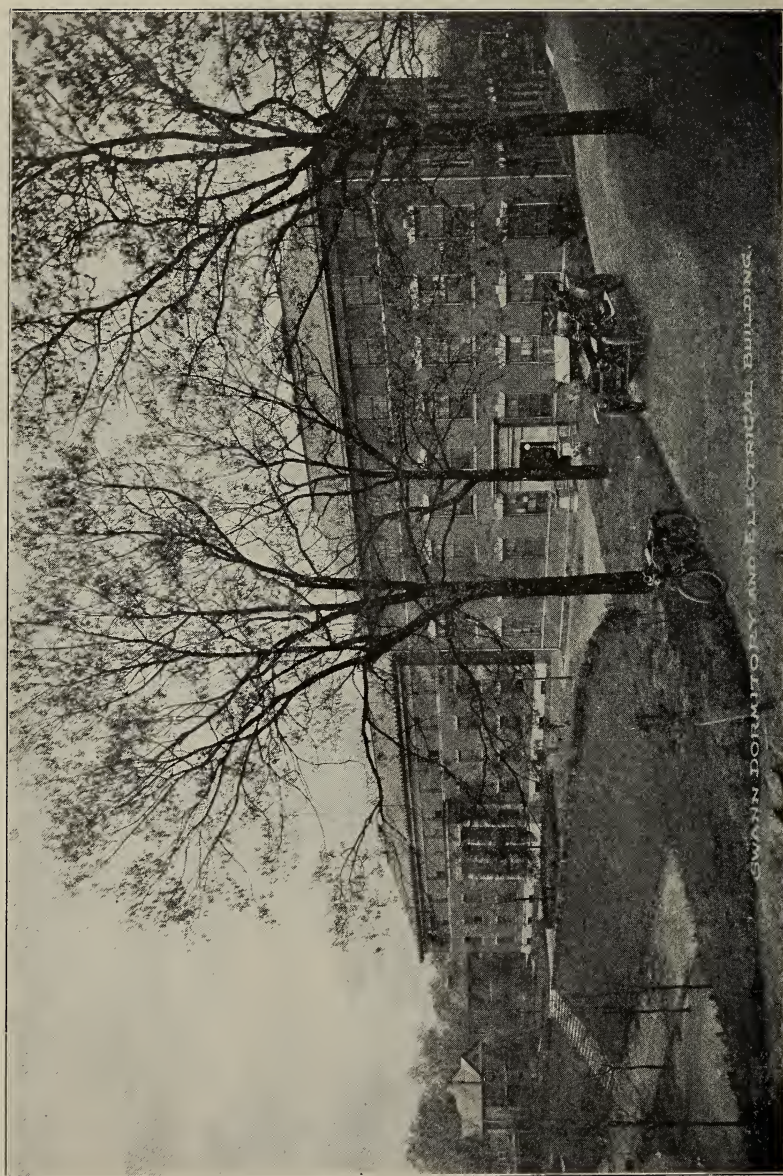
Although supported by the State of Georgia, the benefits of the School extend further than to the matriculates of the State, and the unusual facilities provided for the instruction of Georgians may be had at reasonable cost by residents of other States.



SWANN DORMITORY
Where Half the Freshmen Live.



KNOWLES DORMITORY
Where the Other Half Live.





Requirements for Admission

The applicant shall not be less than 16 years of age, and shall present a certificate from the last school attended, showing his record and that he is of good moral character.

Apprentice Class and Special Textile Course

For entrance to the Apprentice Class and Special Textile course without condition, every applicant shall present:

For September, 1913 9 units

Of these, 4 units must be offered at entrance. Other units must be made up as is required of students entering Freshman Class.

A. Required Units (It is urged that all these be presented at entrance.):

Arithmetic 0 unit

Plane Geometry (2 books) $\frac{1}{2}$ unit

El. Alg. (Factors, Fractions, Fractional Equations)..... $\frac{1}{2}$ unit

English Grammar 1 unit

History 1 unit

B. Optional Units, same as for Freshman Class.

Freshman Class

For Entrance to the Freshman Class without condition, every applicant shall present:

For September, 191313 units

For September, 191414 units

Of these, ten units must be offered at entrance. Units due in Mathematics and Physics shall be made up before entering the Sophomore Class. All other units due shall be made up before entering the Junior Class.

A. Required Units (It is urged that all these be presented at entrance.):

Elementary and Advanced Algebra (Including Logarithms, Binominal Theorem, Partial Fractions, Progressions, Ratio and Proportions) $1\frac{1}{2}$ units

Plane and Solid Geometry $1\frac{1}{2}$ units

English, English Grammar, College Entrance Requirements in Classics; Elementary Rhetoric3 units

History (General, Ancient, Modern, English).....2 units

El. Physics with Individual Lab.1 unit

or, with Lecture Demonstration, only $\frac{1}{2}$ unit

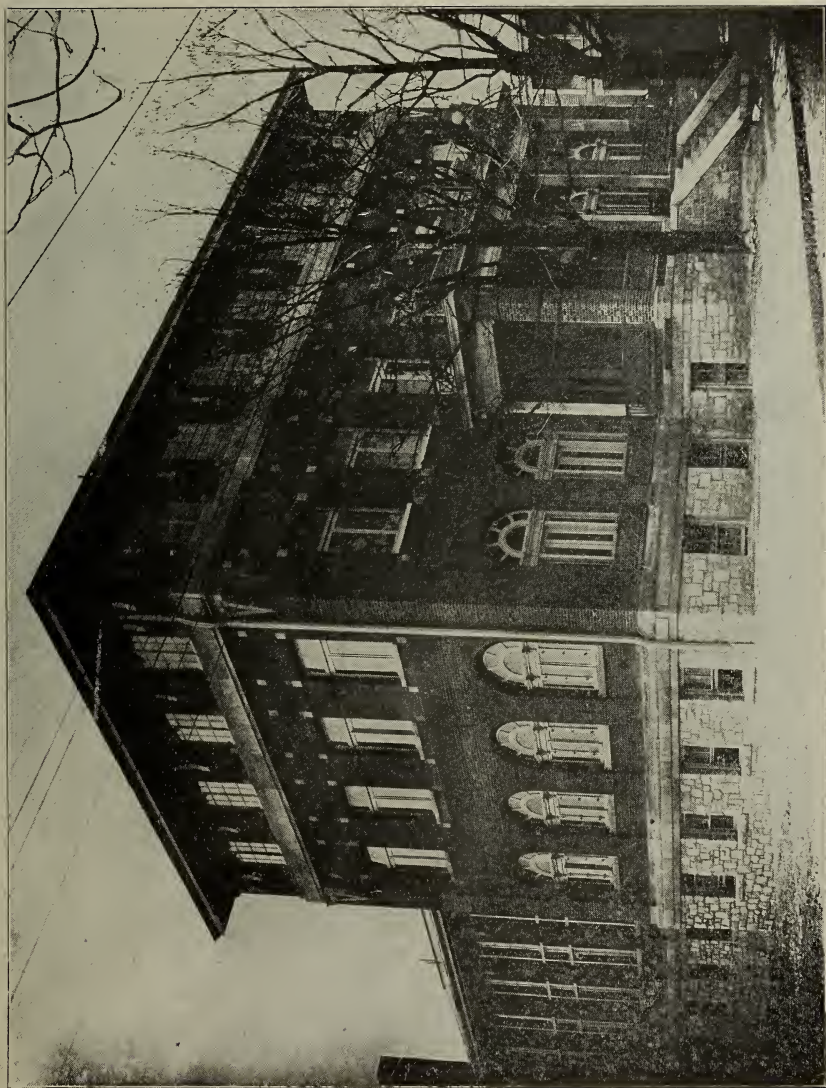
In addition to the required units offered, the applicant must present enough of the Optional Units in the following list to complete his ten entrance units:

B. Optional or Elective Units.

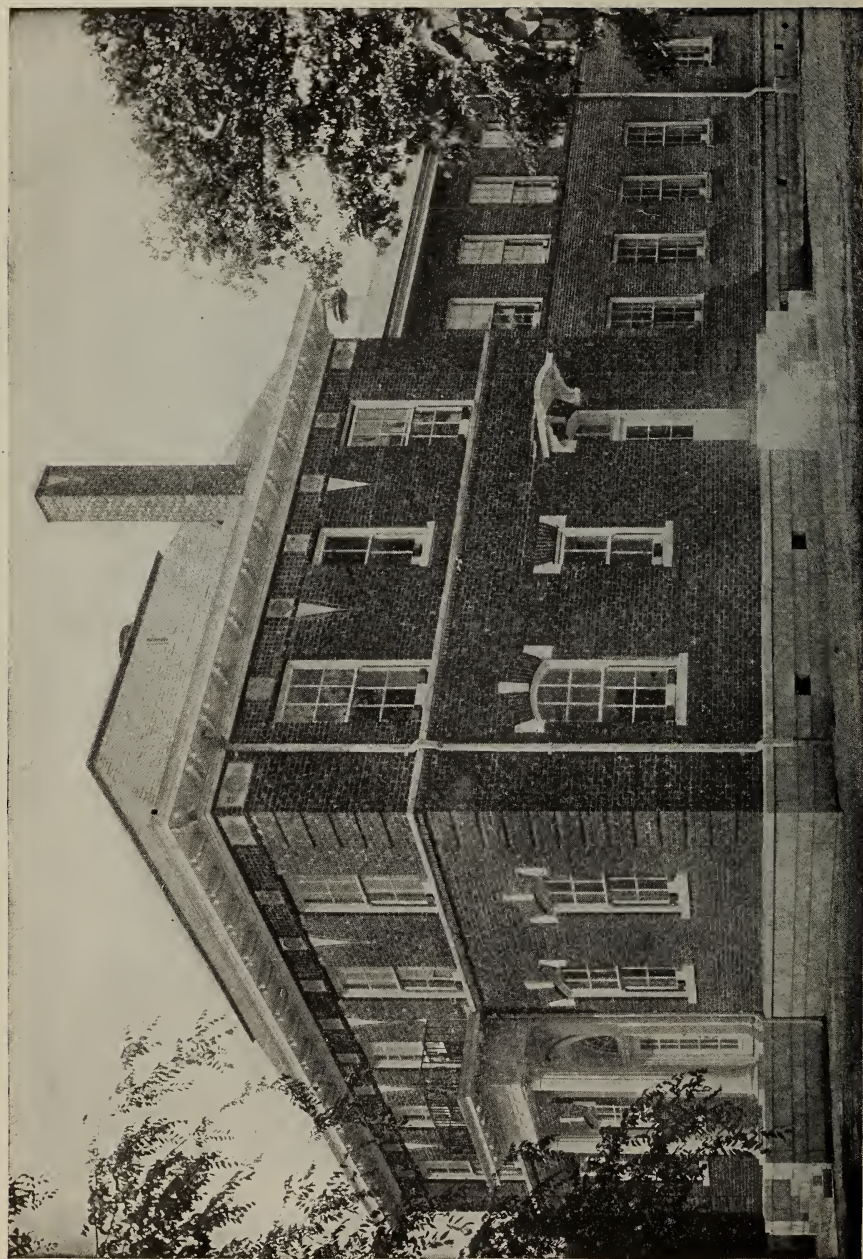
1. History, $\frac{1}{2}$ to 2 units.
2. Civics, $\frac{1}{2}$ to 2 units.
3. Latin, 2 to 3 units.
4. Greek, 2 to 3 units.
5. German, 1 to 2 units.
6. French, 1 to 2 units.
7. Spanish, 1 to 2 units.
8. Botany, $\frac{1}{2}$ to 1 unit.
9. Physical Geography, $\frac{1}{2}$ to 1 unit.
10. Physiology, $\frac{1}{2}$ to 1 unit.
11. Biology, 1 unit.
12. Zoology, $\frac{1}{2}$ to 1 unit.
13. Free Hand Drawing.
14. Manual Training.
15. Elementary Inorganic Chemistry, $\frac{1}{2}$ to 1 unit.

Not more than 4 units can be selected from the Languages.

We wish to urge that a student shall have a good command of the Mathematics which he presents for admission, as we use discretion in all cases where it is thought to the best interest of the student to take work over; as when it develops that he can not carry the work to which he has been assigned.



JOHN D. ROCKEFELLER YOUNG MEN'S CHRISTIAN ASSOCIATION BUILDING
The Finest College Association Building in the South, Possibly in this Country.



THE JOSEPH BROWN WHITEHEAD MEMORIAL HOSPITAL
Another Example of Tech's Lead Among Southern Institutions.



CARNEGIE LIBRARY BUILDING

New Buildings

The new Joseph Brown Whitehead Memorial Hospital is a completely equipped modern hospital devoted to the needs of the student body. It is erected on the east side of Cherry Street, and covers approximately 4,000 square feet with a capacity of 27 patients. The building is constructed of brick and marble, is heated with steam from the central heating plant of the School, and is equipped with a special system of ventilation.

The Young Men's Christian Association Building

Mr. John D. Rockefeller donated \$50,000 for this building on condition that the School raise \$25,000 in addition. This amount was raised by popular subscription and the building is now completed. It is among the handsomest students' Y. M. C. A. buildings in the country. It was dedicated on June the twelfth, nineteen hundred and twelve.

This building is a center for student life, which we have needed so long. We had not realized the urgency of the need for such a building until we got it and began to use it in so many ways. The presence of the various offices—one for every student interest, the students' post office, the barber-shop, the lunch room, the lockers, the showers, the game rooms, the spacious lobby, the reading rooms, the writing rooms—all draw the students. The auditorium gives us a place for entertainments, for rehearsals, and for public occasions of all kinds. The building is the headquarters for the band, the glee club, the orchestra, the dramatic club, the athletic association, and a general rendezvous for the students.

The Young Men's Christian Association is the largest student organization in college, and great interest is taken in its work by both students and faculty members. The organization has been fortunate in that it has succeeded in enlisting some of the strongest men in college in its work. The most prominent athletes were among its leaders during the year 1912-13, and it has enlisted men from every department of college life.

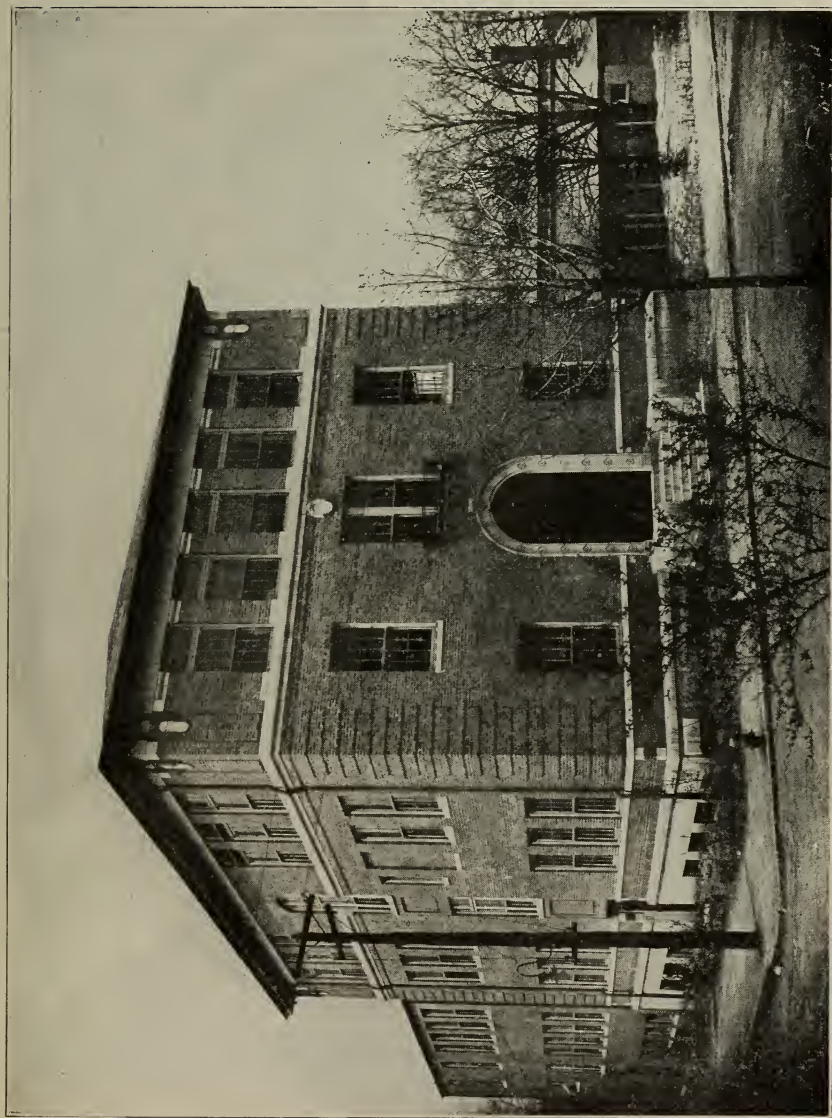
The feature of the work that is most far-reaching is the volunteer Bible study, in which were enlisted during the past year over 200 men. A General Secretary and an Associate Secretary are employed to direct the work among the students. The present secretaries are Mr. E. A. Turner, M. A., LL. B., of Wake Forest College; and H. F. Comer, B. S., of Vanderbilt University.

The word we have for the parents is, that they urge upon their sons the importance of having the best influences in college thrown around them, and therefore the necessity of entering heartily into the activities of the Association.

Nothing will mean more to the boy while he is here than the fellowship of an association Bible study group.

He will find friends in the secretaries and the Association men generally.

The Association stands for clean, manly Christianity, and the development of the highest type of character.



MECHANICAL ENGINEERING BUILDINGS

Comprising Administration Hall, Smith Shop and Foundry. Later, a Machine Shop, Wood Shop, and Corresponding Administration Hall Will be Added.

With the growth of the School, adequate as our shop equipment seemed to be, it has been outgrown, and 1912 saw a portion of the shops displaced by new ones of a decidedly better class. The new shops comprise a smith shop containing space for forty (40) forges—twice the former equipment—and a foundry. Both these shops are strictly up-to-date, perhaps their most marked characteristics being a flood of light, with splendid ventilating systems. The down-draft system of forges are installed in the smith shop, with also a score of vises for bench work. The foundry is equipped with core oven, brass foundry, overhead traveling crane, and an oil system for starting cupola fires. All roof trusses are of steel, in both shops, with a glass monitor roof. All blowers are electrically driven.

Students Advisor System

At the beginning of the school year each student in the College is assigned to some member of the Faculty who will act as his advisor during the year. Each advisor will have regular hours when the student can consult with him relative to any phase of his student life, whether in regard to his studies, his finances, his social life, his associations, or any other matter which concerns him. It is contemplated that the number of students assigned to each advisor will not be so large as to prevent his advising frequently and fully with each one.

In case any individual member of the Faculty is desired to serve as the advisor of some particular student, this desire may be made known to the President, and if practicable, arrangements will be made to comply with the wish thus expressed.

Fees and Expenses

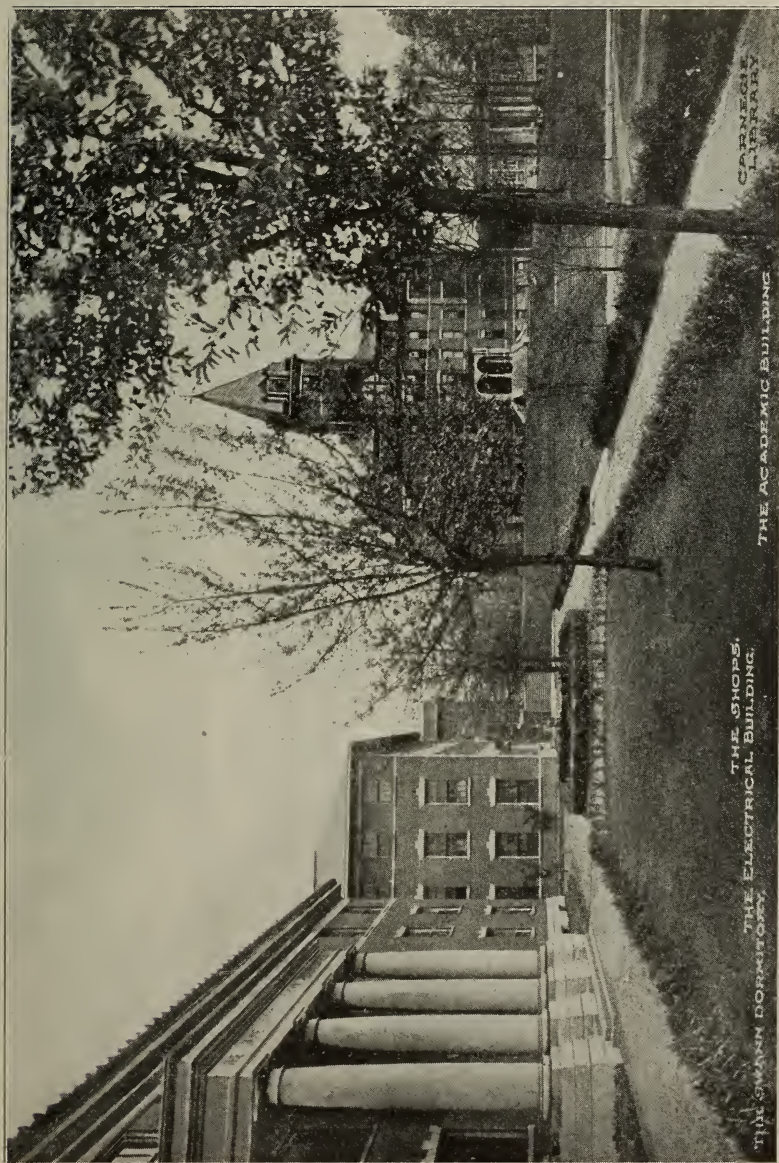
The fees are \$25 per year when there are fifteen or less than fifteen students from the county of the applicant. All students in excess of fifteen from any county pay \$25 tuition per year additional. Also, all students not residing at home will pay a medical fee of \$5.00 per term, which will entitle them to the benefits of the new Hospital. A deposit fee of \$5 is required on entrance, which is returned if no damage to property is charged when the student leaves the School. Fees are payable semi-annually, half on entrance and the balance in February, and are prorated when a student enters during the session.

Students from other States and from foreign countries pay \$100 tuition fee per year, in addition to the fees of \$25, \$5.00 and \$5.00 mentioned above.

The School's new and well-equipped dormitories accommodate two hundred students at \$17.00 per month each—heating, laundry, and lights included with board and lodging.

As the demand for dormitory accommodations is much greater than the supply, prospective students are urged to apply for rooms as soon as possible. In case there be no vacancies, applicants will be placed on the Waiting List, and will be assigned rooms as vacancies may occur. In the meantime, desirable board at reasonable rates may be obtained in the vicinity of the School.

Complete information for prospective students is contained in the handsome Catalog of the School, which well be sent, upon application for it, by President K. G. Matheson, A.M., LL.D., Atlanta, Georgia.



THE SWANN DORMITORY.
THE ELECTRICAL BUILDING.
THE SHOPS.

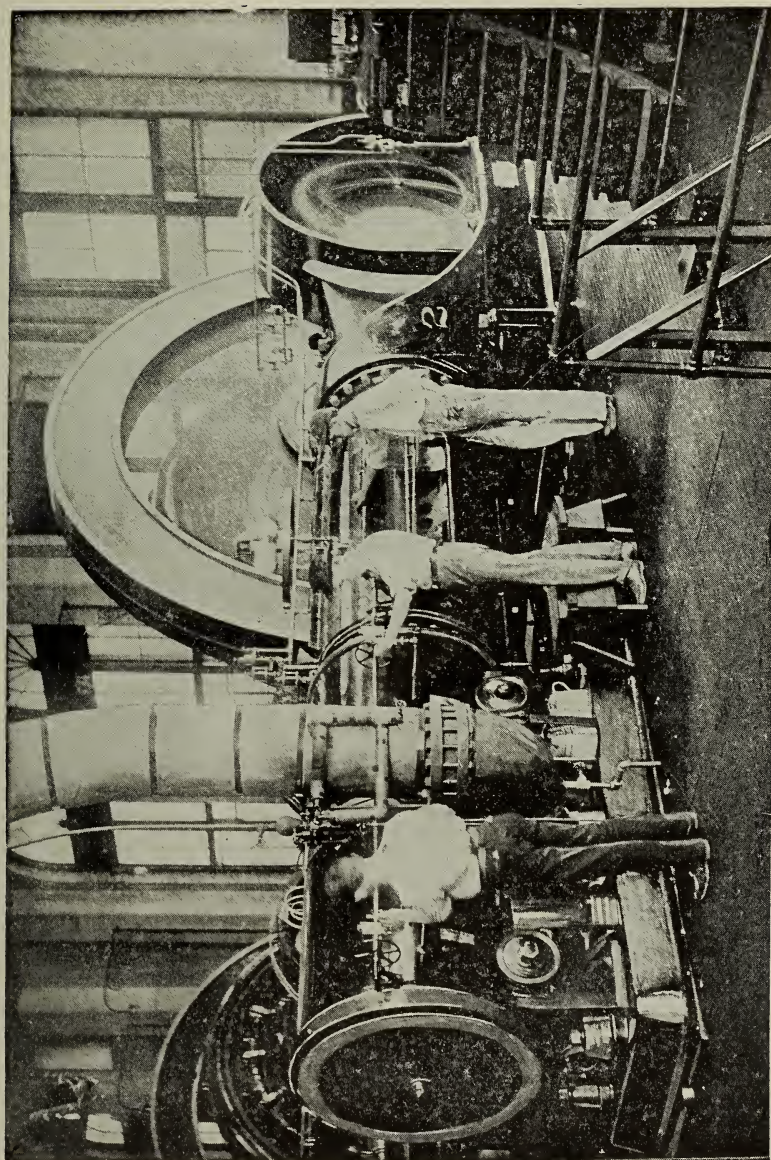
THE ACADEMIC BUILDING.

CARNEGIE
LIBRARY

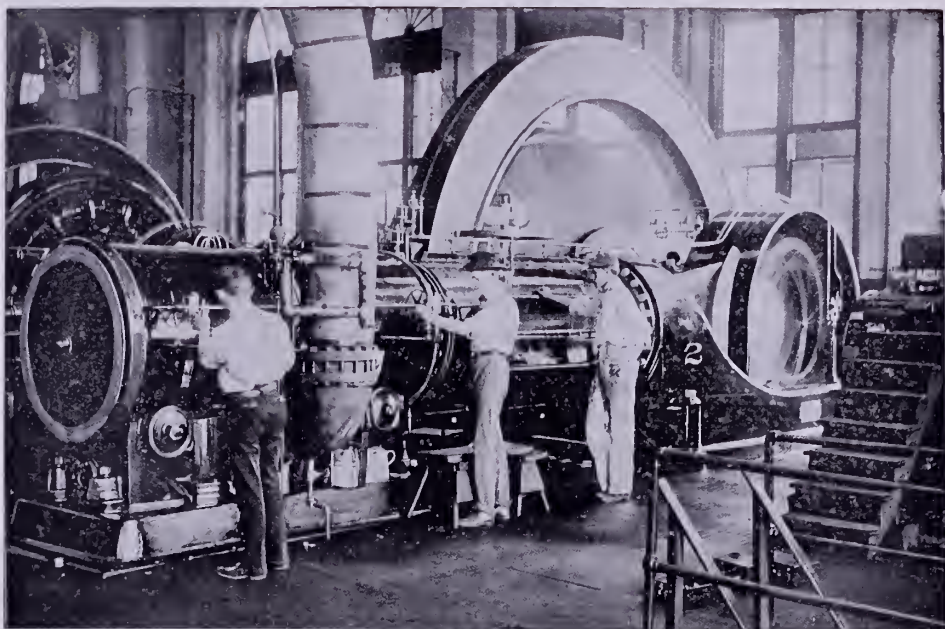
Partial View of the Campus and Buildings of the Georgia School of Technology, Atlanta, Ga.



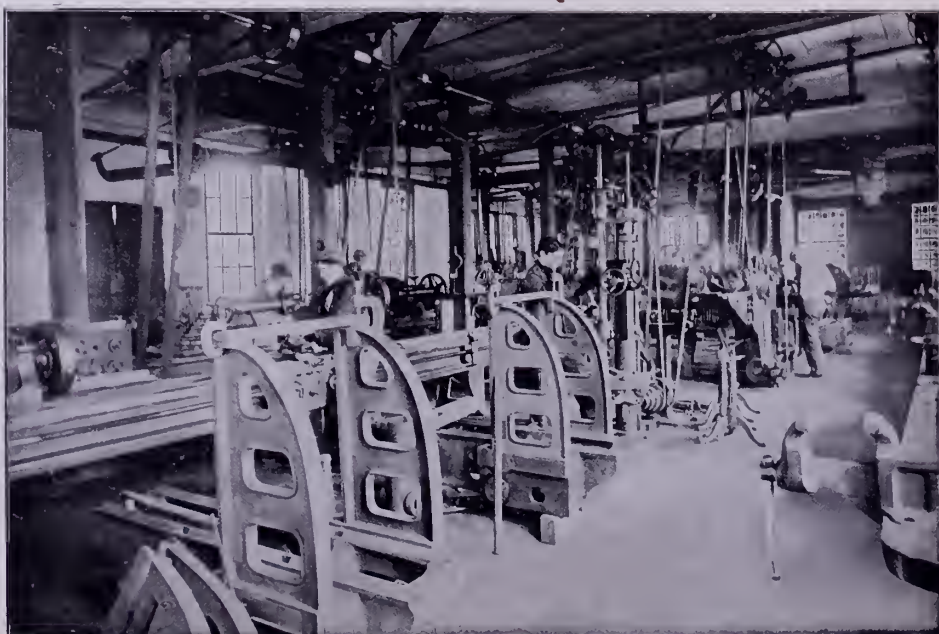
SENIOR CIVIL ENGINEERING STUDENTS MAKING SURVEYS FOR COMPLETE WATER AND SEWERAGE SYSTEM FOR KIRKWOOD, GEORGIA



INDICATING AN ENGINE



INDICATING AN ENGINE



IRON PLANERS IN PROCESS OF MANUFACTURE, MACHINE SHOP



Swann Dormitory



Electrical Building

Shops

MECHANICAL ENGINEERING, ELECTRICAL ENGINEERING, CIVIL ENGINEERING, TEXT
Partial View of the Campus and Buildings of the



Academic Building

Carnegie Library

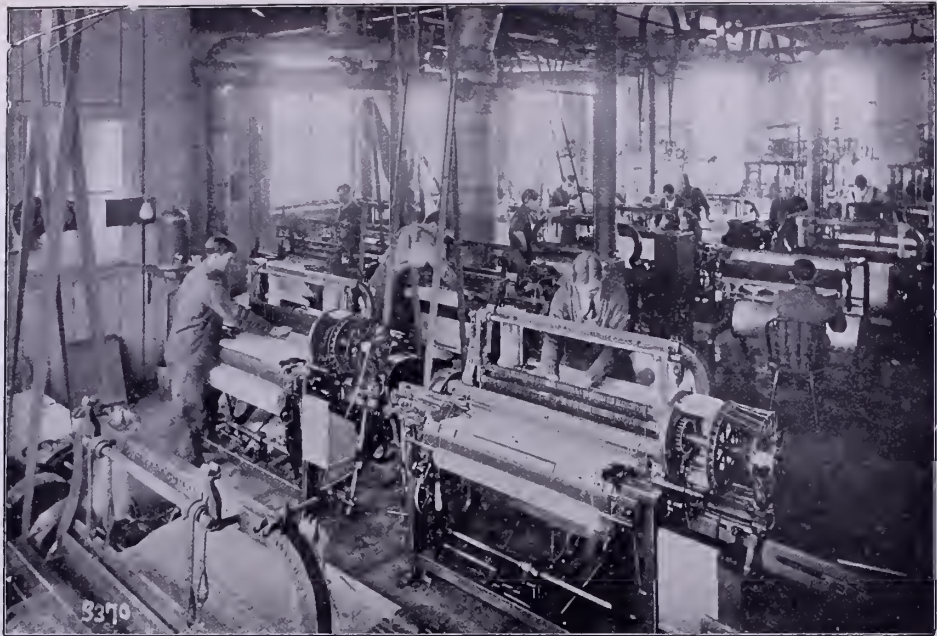
Lyman Hall Laboratory
of Chemistry

Knowles Dormitory

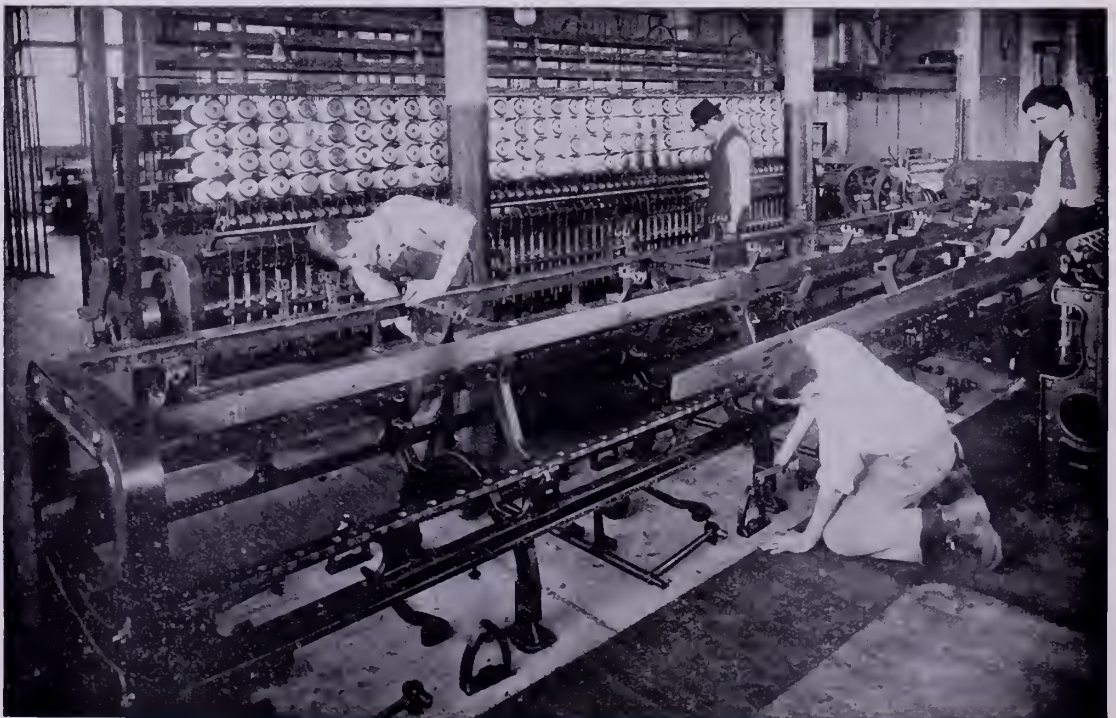
(A. French Textile School President's House, Two Dormitories, Hospital, Smith Shop, new Y. M. C. A. and new Shop Buildings not visible.)

FILE ENGINEERING, ENGINEERING CHEMISTRY, CHEMISTRY AND ARCHITECTURE

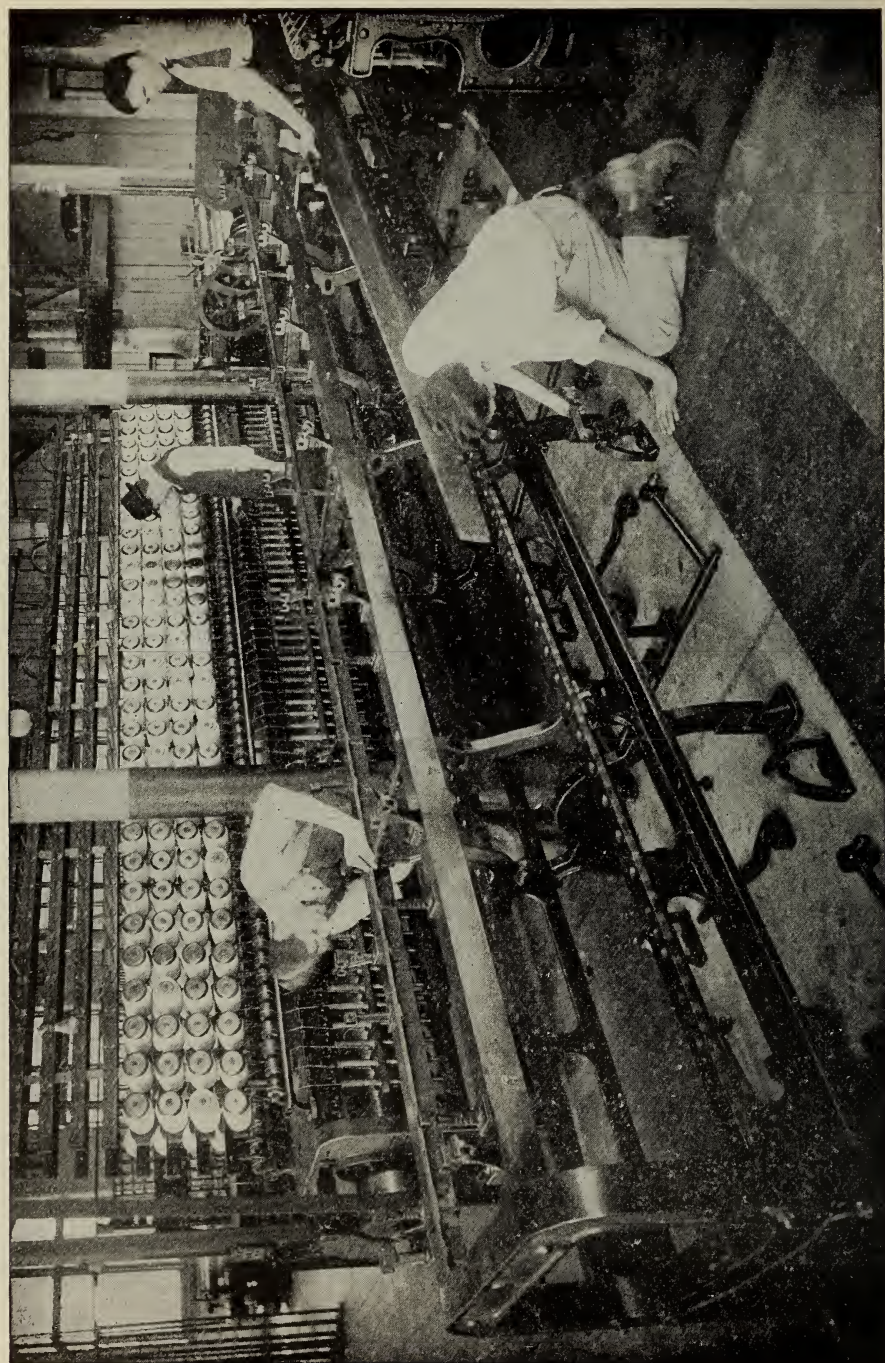
Georgia School of Technology, Atlanta, Ga.



PLAIN LOOM WEAVING



ERECTING RING TWISTER



ERECTING RING TWISTER

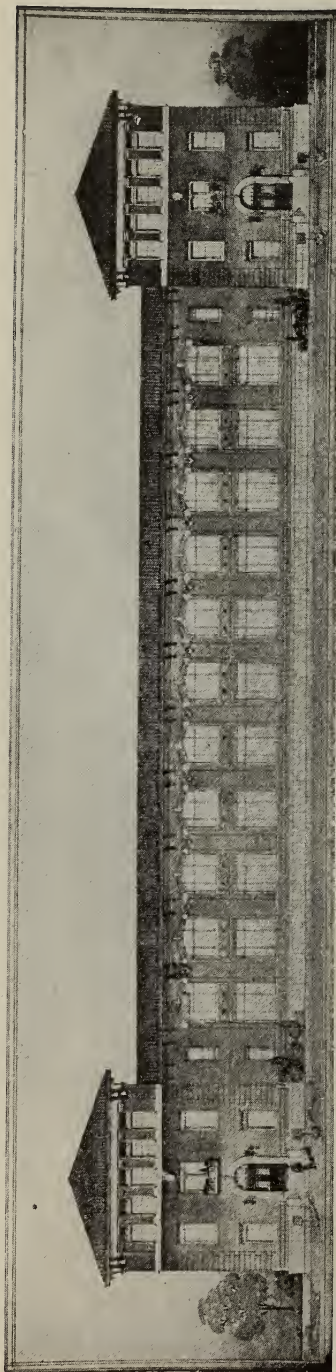


THE BAND

“In the Joy of Victory or in the Lamentation of Defeat,
Always Ready.”



Y. M. C. A. OFFICERS



NEW ENGINEERING SHOP BUILDINGS IN FIVE UNITS, THREE OF WHICH HAVE BEEN COMPLETED
EQUIPMENT

The Mechanical, Electrical, Chemical, Experimental and Physical laboratories have been fitted up with reference to practical work, and such additions will be made from time to time as may be required for experimental research. The apparatus, and appliances are of the newest and best forms, and will be increased as occasion may demand.

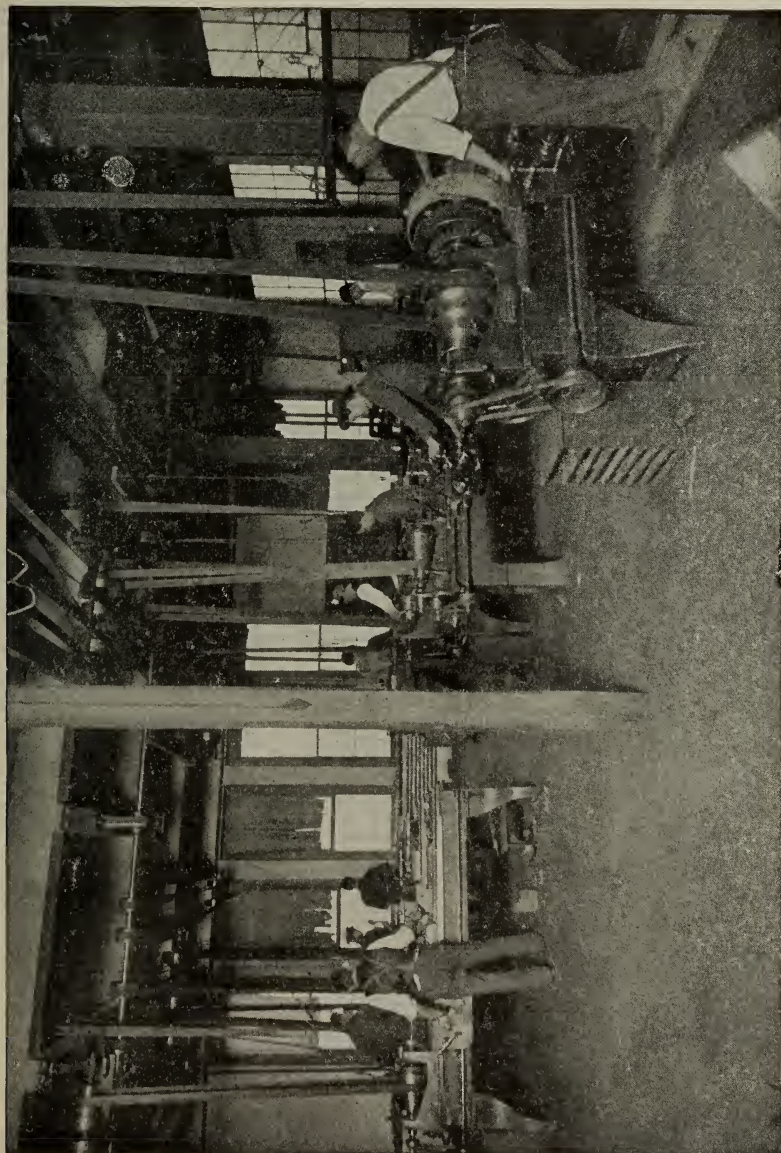
The workshops have been equipped with machinery and tools from the best makers, and of the latest pattern, at a cost of over fifty thousand dollars. In pursuance of the fundamental idea of giving the student access to the best machinery, and experimental knowledge of the best methods of mechanical work, the Trustees have put the Mechanical Department on a footing with the most improved and complete shops in the country, and scarcely any process requiring fine material and accurate workmanship is beyond its capacity.

The shops of the institution have won an enviable reputation for the quality of their iron and brass castings, perfection in gear-cutting, and the beauty and variety of their wood and other work.

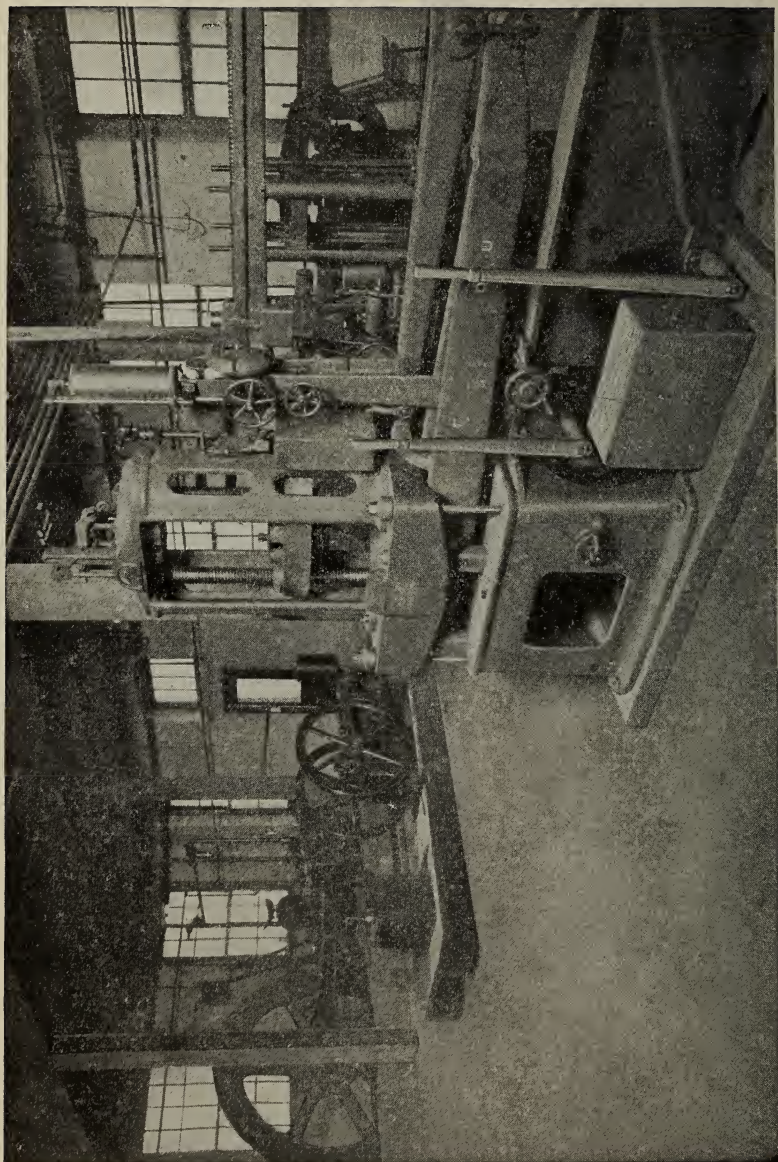
The Textile building has an unsurpassed equipment of cotton manufacturing machinery.

Valuable additions have recently been made to the equipment of the Department of Civil Engineering, Mechanical Engineering, and Electrical Engineering.

The Department of Architecture has been provided with thorough equipment for the conduct of the Department.



MACHINE SHOP—SECTION 2



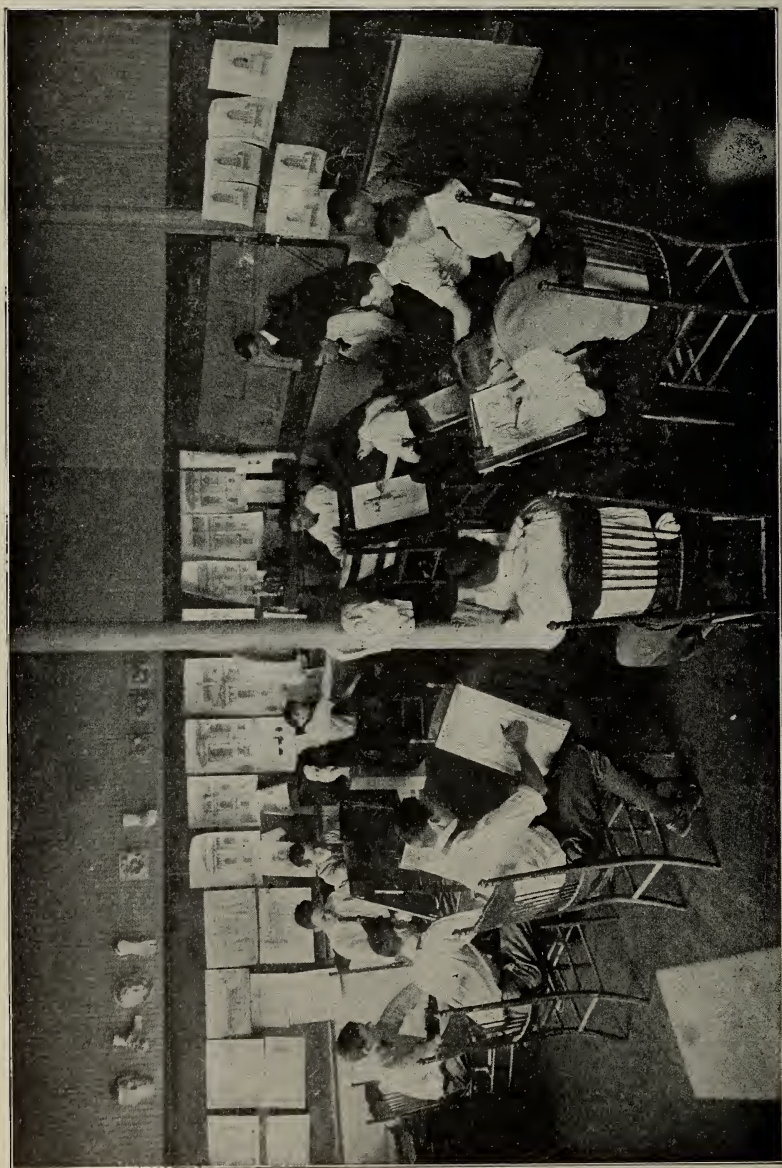
EXPERIMENTAL LABORATORY, NO. 2



QUANTITATIVE LABORATORY



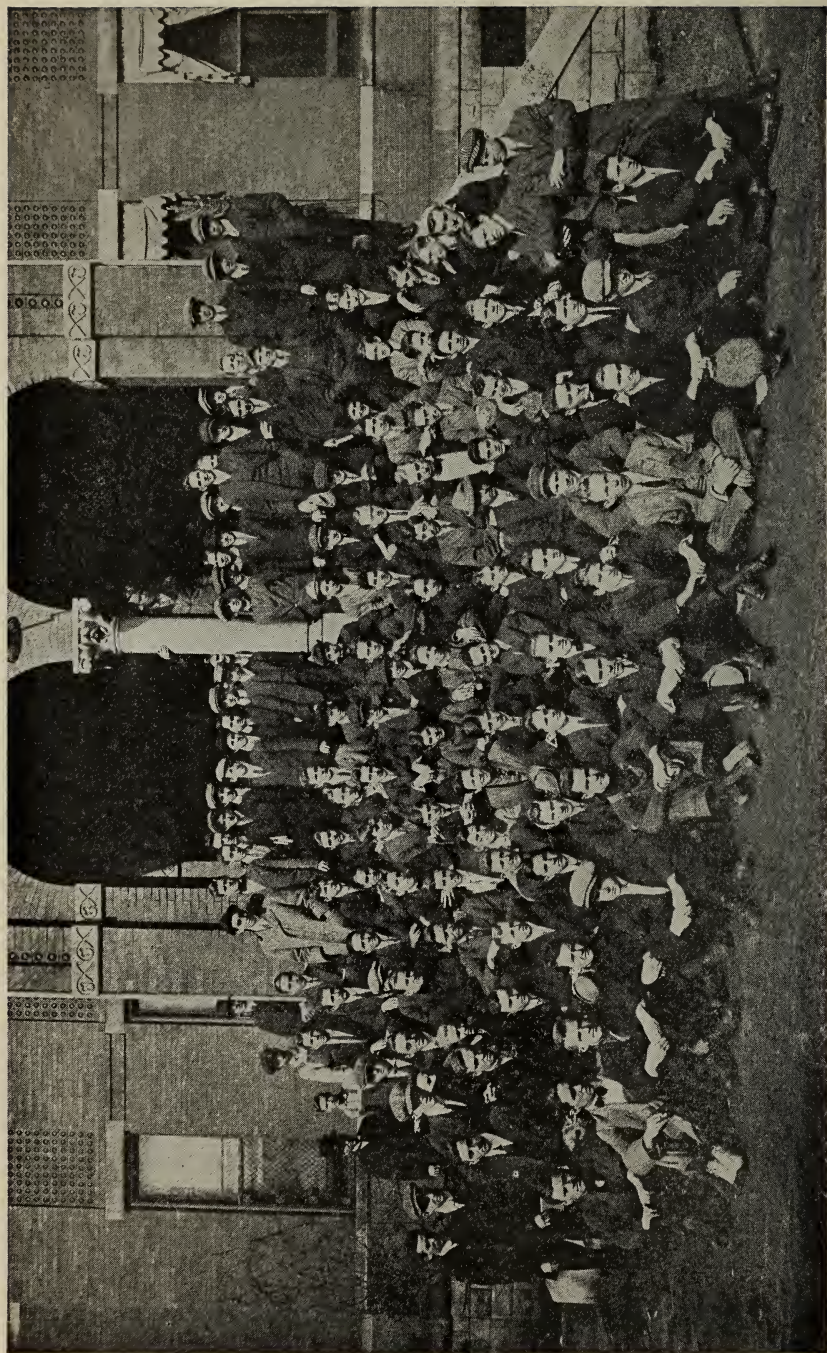
OFFICERS AND CREW STEAMSHIP "CITY OF SAVANNAH"



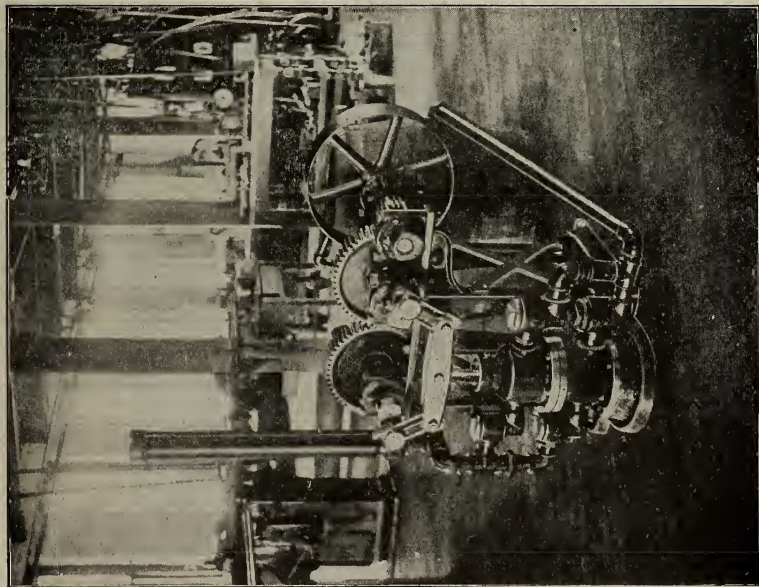
ARCHITECTURAL FREE HAND DRAWING



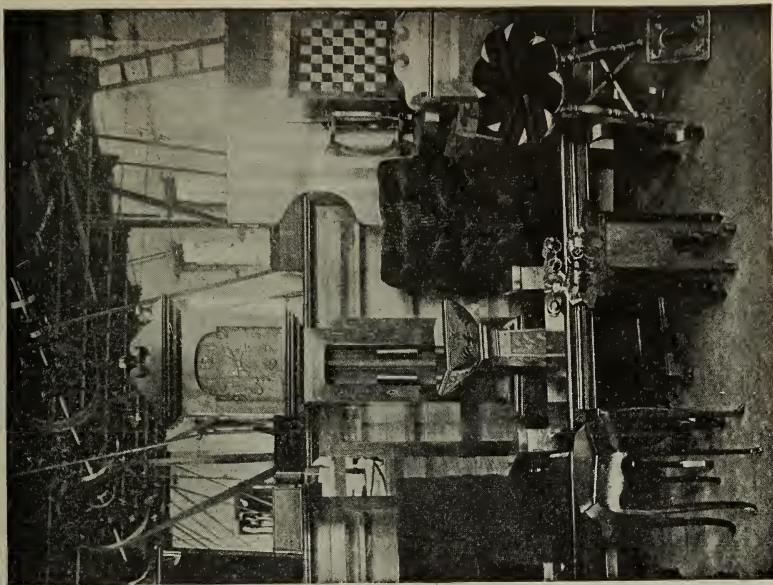
THE DRAWING-ROOM FOR FRESHMAN, SOPHOMORE AND JUNIOR CLASSES



FRESHMAN CLASS



**GENERAL BOILER FEED PUMP—BUILT IN
THE SCHOOL SHOPS**



SOME PRODUCTS OF THE WOOD SHOP



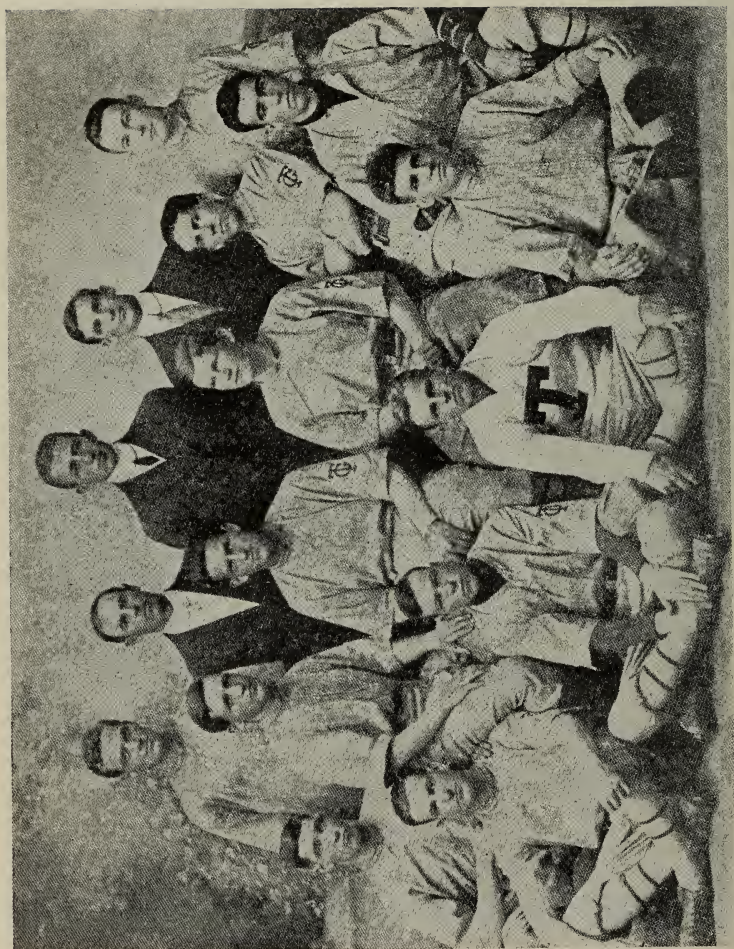
THE ARCHITECTURAL SOCIETY



A CHAPTER HOUSE



TECH. FOOTBALL TEAM



TECH. BASEBALL TEAM



THE BASKET BALL TEAM



ORCHESTRA



THE HONOR COURT

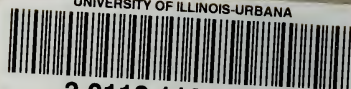


TECH. GLEE CLUB



AN EXCITING MOMENT IN ONE OF THE MOST IMPORTANT FOOT BALL GAMES

UNIVERSITY OF ILLINOIS-URBANA



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